PATENT NO. : 6,792,947 B1 Page 1 of 5

APPLICATION NO.: 09/648143

DATED : September 21, 2004

INVENTOR(S) : Bowden

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The title page, showing an illustrative figure, should be deleted and substitute therefor the attached title page.

Delete drawing sheets 1-3, and substitute therefor the drawing sheets, consisting of FIGS. 1-4 as shown on the attached pages.

Signed and Sealed this

Twenty-eighth Day of July, 2009

John Ooll

JOHN DOLL
Acting Director of the United States Patent and Trademark Office

### (12) United States Patent Bowden

(10) Patent No.: (45) Date of Patent:

US 6,792,947 B1 Sep. 21, 2004

(54)	FLOW CONTROL VALVE FOR MANUAL
	RESUSCITATOR DEVICES

(75) Inventor: Kevin D. J. Bowden, Orangeville (CA)

(73) Assignee: O-Two Systems International Inc. (CA)

(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 386 days.

(21) Appl. No.: 09/648,143 (22) Filed: Aug. 25, 2000

(51) Int. Cl.<sup>7</sup> ...... A62B 7/00; A61M 16/00

(52) U.S. Cl. ...... 128/205.17; 128/203.11; 128/205.14; 128/205.13; 128/203.28; 128/207.14; 128/207.16; 137/908

(58) Field of Search ...... 128/203.11, 204.25, 128/205.17, 205.14, 205.13, 204.18, 203.28, 202.28, 202.29, 207.16, 207.14, 204.28; 137/908, 102, 107, 1

#### References Cited (56)

#### U.S. PATENT DOCUMENTS

2,990,838 A	+	7/1961	Cross	137/102
3,009,459 A	*	11/1961	Ruben	128/205.13
3,610,237 A	+	10/1971	Barkalow et al	128/204.19
3,672,366 A	٠	6/1972	Burchell et al	128/205.24
3,964,476 A	*	6/1976	Palleni	128/205.13
4,004,603 A	*	1/1977	Jones	137/107
4,192,301 A		3/1980	Hardwick	128/205.17
4,239,038 A	+	12/1980	Holmes	128/205.13
4,622,964 A	*	11/1986	Flynn	128/205.24
4,774,941 A	*	10/1988	Cook	128/205.13
4,821,713 A	*	4/1989	Bauman	128/205.13
4,836,198 A	*	6/1989	Gates	128/205.18
4,898,167 A		2/1990	Pierce et al	128/205.16
5,140,982 A		8/1992	Bauman	128/205.13
5,230,330 A	٠	7/1993	Price	128/203.11
5,301,667 A		4/1994	McGrail et al	128/205.14
5,368,022 A		11/1994	Wagner	128/205.24
5,398,714 A		3/1995	Price	137/102

5,425,358	Λ		6/1995	McGrail et al 128/205.24
5,492,115	Α	*	2/1996	Abramov et al. , 128/205.24
5,537,998	Α	٠	7/1996	Bauman 128/205.23
5,537,999	Λ	•	7/1996	Dearman et al 128/205.25
5,557,049	Α		9/1996	Ratner 73/715
5,619,988	Α		4/1997	Mattila et al 128/205.24
5,632,298	Α		5/1997	Artinian 137/102
5,651,361	Λ	٠	7/1997	Dearman et al 128/205.25
5,687,709	4		11/1997	Akerberg 128/203.12
2,007,102	Λ.		11/1321	Akerberg 128/203.12
5,722,394			3/1998	Loescher
	A		•	
5,722,394	A A		3/1998	Loescher 128/205.24
5,722,394 5,727,546	A A A		3/1998 3/1998	Loescher
5,722,394 5,727,546 5,878,743	A A A	•	3/1998 3/1998 3/1999	Loescher
5,722,394 5,727,546 5,878,743 5,944,013	AAAA		3/1998 3/1998 3/1999 8/1999	Loescher
5,722,394 5,727,546 5,878,743 5,944,013 6,102,038	A A A A B1	•	3/1998 3/1998 3/1999 8/1999 8/2000	Loescher       128/205.24         Clarke et al.       128/203.15         Zdrojkowski et al.       128/204.23         Burch       128/205.14         De Vries       128/205.24

#### OTHER PUBLICATIONS

A.H.A., Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care-J.A.M.A., Oct. 28, 1999, 2171-2295.

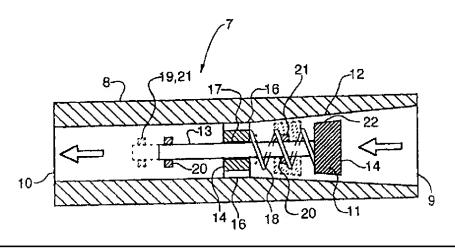
(List continued on next page.)

Primary Examiner-Henry Bennett Assistant Examiner-Mital Patel (74) Attorney, Agent, or Firm-Kusner & Jaffe

ABSTRACT

An improved manual resuscitation device such as a bagvalve-mask (BVM) device with flow control valve to eliminate the danger of patient distension and aspiration of stomach contents during ventilation. The BVM baving the usual patient mask with a gas inlet and flexible patient face sealing edge, flexible manually squeezed bag with a one way intake and output valves in flow communication with a gas source and the mask inlet, and exhaust port for exhausting exhaled gas from the mask when the bag output valve is closed. The flow control valve is interposed between the mask and bag to automatically and variably limit the rate of gas flow from the bag to the mask between a predetermined minimum flow rate and a maximum flow rate. A similar flow control valve can be included in any manual resuscitation device such as a pocket mask or face shield to equal advantage.

#### 10 Claims, 3 Drawing Sheets



PATENT NO. : 6,792,947 B1 Page 3 of 5

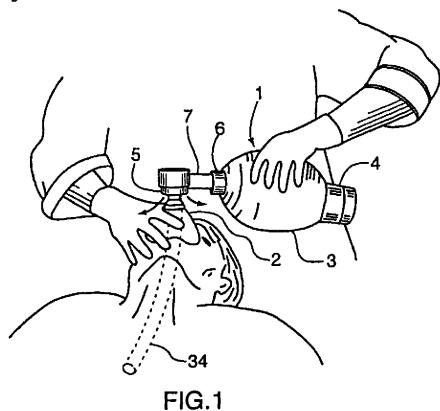
APPLICATION NO.: 09/648143

DATED : September 21, 2004

INVENTOR(S) : Bowden

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

### Sheet 1, Figure 1



PATENT NO. : 6,792,947 B1 Page 4 of 5

APPLICATION NO.: 09/648143

DATED : September 21, 2004

INVENTOR(S) : Bowden

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

### Sheet 2, Figure 2

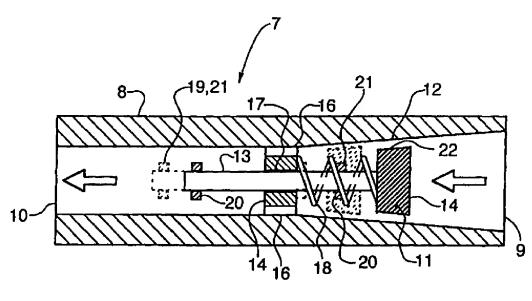


FIG.2

PATENT NO. : 6,792,947 B1 Page 5 of 5

APPLICATION NO.: 09/648143

DATED : September 21, 2004

INVENTOR(S) : Bowden

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

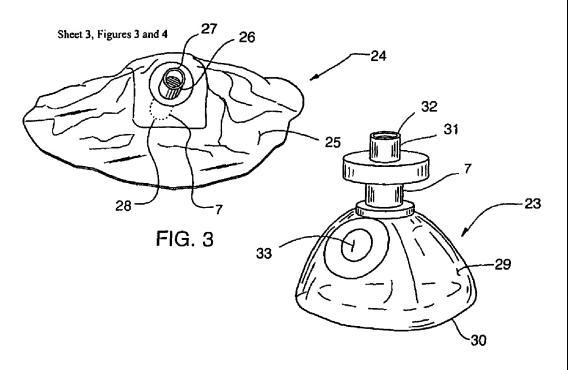


FIG. 4